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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/602,880	SEO ET AL.
	Examiner	Art Unit	
	HEATHER JONES	2481	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 May 2011</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,6,7,9,16-18,20,21,23-26,29,30,32,33,37 and 44</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2,6,7,9,16-18,20,21,23-26,29,30,32,33,37 and 44</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 June 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☒ All   b)☐ Some * c)☐ None of:

   1.☒ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>5/27/2011,6/27/2011</u>.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed May 5, 2011 have been fully considered but they are
not persuasive.

        The Applicant argues that Sato et al. and Kato et al. are not combinable.
The Examiner respectfully disagrees and the Examiner is not combining all of the
elements from those references together, but only certain elements.
Furthermore, in response to applicant's arguments against the references
individually, one cannot show nonobviousness by attacking references
individually where the rejections are based on combinations of references. See
In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800
F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

        The Applicant argues that Sato et al. in view of Kato et al. in view of
Hirayama et al. in view of Laurin et al. fails does not teach or suggest "the playlist
file including at least one playitem identifying a same playing interval in each clip
file of the plurality of clip files associated with the multiple playback paths for the
playlist file". The Examiner respectfully disagrees. Laurin et al. was referenced
in order to disclose this feature. Furthermore, Laurin et al. discloses in
paragraph [0082] that each play list organizes the different play list items that
represent the different scenes that make up a particular presentation, which can
be seen in Fig. 9. Fig. 9 also shows the playitems having the size interval for the
different versions. Paragraph [0085] describes an example of four audiences A,

B, C, and D touring the Eiffel Tower where each audience is listening to a
different version of the same tour simultaneously in their own language, which
discloses that the playitems have the same playing interval in order to keep the
group together. Therefore, Laurin et al. meets the claimed limitation and the
rejection is maintained.

The Applicant argues that Sato et al. in view of Kato et al. in view of
Hirayama et al. in view of Laurin et al. fails does not teach or suggest "each clip
file including a plurality of data packets of the video data being associated with
one path of the multiple playback paths, each data packet having a packet
number differentiating the data packet from the plurality of data packets" and the
clip information file providing at least one map, the map identifying at least one
entry point for the associated clip file by identifying the packet number of the data
packet of the at least one entry point". The Examiner respectfully disagrees.
Sato et al. discloses in Figs. 21, 30, and 31 each clip file (block) including a
plurality of data packets of video data being associated with one path of the
multiple playback paths (col. 6, lines 65-67; col. 33, lines 17-59 describes the
interleaving blocks for the multi-path video data). Furthermore, Hirayama et al.
discloses each data packet having a packet number differentiating the data
packet from the plurality of data packets (Figs. 9A-9D disclose the packets each
being differentiated and represented by a number). Hirayama et al. also
discloses the clip information file providing at least one map, the map identifying
at least one entry point for the associated clip file by identifying the packet

number of the data packet of the at least one entry point (Fig. 8A-8C - the PIF is
equivalent to a entry point map telling the system which packet needs to be
played next after the packet currently being reproduced). Kato et al. further
discloses an entry point map as well which can be seen in Fig. 30. Therefore,
once all of these references are combined as described below in claim 1 the
limitations are met and the rejection is maintained.

The Applicant argues that Hirayama et al. fails to disclose a "clip file". The
Examiner respectfully disagrees. Hirayama et al. discloses in Fig. 18B the multi-
path packets being combined into one clip file which is represented as #15 (col.
14, lines 25-35). Therefore, Hirayama et al. meets the claimed limitations and
the rejection is maintained.

The Applicant argues that Hirayama et al. fails to disclose "reproducing at
least one clip file of the video data having the multiple playback paths from a
specific entry point identified by the packet number based on the playlist file and
the management information". The Examiner respectfully disagrees. Hirayama
et al. discloses the clip information file providing at least one map, the map
identifying at least one entry point for the associated clip file by identifying the
packet number of the data packet of the at least one entry point (Fig. 8A-8C - the
PIF is equivalent to a entry point map telling the system which packet needs to
be played next after the packet currently being reproduced). Hirayama et al. also
discloses in Fig. 18B the multi-path packets being combined into one clip file
which is represented as #15 (col. 14, lines 25-35). As can be seen from Fig. 8B,

when the PIF would call for the #12 program bar to be displayed next, then the

system would know where to read from clip file #15 which is displayed in Fig.

18B. Therefore, Hirayama et al. meets the claimed limitations and the rejection

is maintained.

35 USC § 101

2.   Optical recording medium claims 1, 2, 6, 7, 9, 37, and 44 are considered to be

statutory because they do not include transitory mediums. Method claims 16-18, 29,

30, 32, and 33 are considered to be statutory because managing reproduction of video

data containing data packets can not be performed without the aid of a machine to

process the video data. Apparatus claims 20, 21, and 23-26 are considered to be

statutory because the specification does not disclose that the apparatus can be

implemented solely using software.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 2, 6, 7, 9, 16-18, 20, 21, 23-26, 29, 30, 32, 33, 37, and 44 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (U.S. Patent 5,884,004)

in view of Kato et al. (U.S. Patent Application Publication 2002/0145702) in view of

Hirayama et al. (U.S. Patent 5,819,003) in view of Laurin et al. (U.S. Patent Application

Publication 2003/0108164).

Regarding claim **1**, Sato et al. discloses an optical recording medium

having a data structure for managing reproduction of video data having multiple

playback paths, comprising: a data directory storing a plurality of clip files of the

video data having the multiple playback paths, each clip file including a plurality

of data packets of the video data being associated with one path of the multiple

playback paths (Figs. 21, 30, and 31; col. 6, lines 65-67, col. 33, lines 17-59);

and a management directory storing management information for managing

reproduction of the video data having the multiple playback paths, the

management information including a plurality of clip information files, each clip

file being associated with one of the clip information files, the clip information file

providing at least one map, the map mapping a presentation time stamp to a

corresponding source packet address of the associated clip file (Figs. 20-24, 49,

and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store

the addresses of the associated clips). However, Sato et al. fails to disclose that

each data packet having a packet number differentiating the data packet from the

plurality of data packets, a map identifying at least one entry point for an

associated clip file by identifying the packet number of the data packet of the at

least one entry point; and a playlist directory storing a playlist file associated with

the multiple playback paths, the playlist file including at least one playitem

identifying a same playing interval in each clip file of the plurality of clip files

associated with the multiple playback paths for the playlist file, the playitem identifying a playing interval in the plurality of clip files, the playitem identifying the information files associated with the clip files of the multiple playback paths, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses an optical recording medium having a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP_map - entry point map); and a playlist directory storing a playlist file associated with the multiple playback paths, the playlist file including at least one playitem identifying a playing interval of the clip file associated with the playback paths for the playlist file, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played

thereby not creating a lag in the video presentation. However, Sato et al. in view
of Kato et al. fails to disclose that each data packet having a packet number
differentiating the data packet from the plurality of data packets, the playlist file
includes path number information identifying which playback paths are
associated with the playlist; a map identifying at least one entry point for an
associated clip file by identifying the packet number of the data packet of the at
least one entry point; and the playitem identifying a same playing interval in each
clip file of the plurality of clip files associated with the multiple playback paths for
the playlist file.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an
optical recording medium having a data structure for managing reproduction of
video data having multiple playback paths for each title, wherein each data
packet having a packet number differentiating the data packet from the plurality
of data packets (Figs. 9A-9D); a playlist file that includes path number
information identifying which playback paths are associated with the playlist (Fig.
8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); and a
map identifying at least one entry point for an associated clip file by identifying
the packet number of the data packet of the at least one entry point (Figs. 8A-
8C).

Therefore, it would have been obvious to one of ordinary skill in the art at
the time the invention was made to have included path number information
identifying which playback paths are associated with the playlist as disclosed by

Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in

order to have the multiple playback paths played back seamlessly. Furthermore,

once Hirayama et al. is combined with Kato et al. then the playitem would include

multiple clip files having the same playing intervals representing the multiple

playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et

al. fails to disclose that the playitem identifying a same playing interval in each

clip file of the plurality of clip files associated with the multiple playback paths for

the playlist file.

Referring to the Laurin et al. reference, Laurin et al. discloses an optical

recording medium having a data structure for managing reproduction of video

data having multiple playback paths for each title, wherein the playitem

identifying a same playing interval in each clip file of the plurality of clip files

associated with the multiple playback paths for the playlist file (Fig. 9; paragraph

[0082] - as can be seen from Fig. 9 the different versions are the same length -

while using these on a tour people listening to different languages would start

and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have had the playing interval for each clip file

in the multiple playback path being the same as disclosed by Laurin et al. in

medium disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in

order to easily switch between different paths without ruining the timing of all the

other clip files.

Regarding claim **2**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that a group of playlist files is associated with each playback path (Sato et al.: Figs. 20-24 – shows different playback paths).

Regarding claim **6**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the navigation information managing the playlist file to be reproduced (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **7**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claims 1 and 6 including that the different playback paths are related to different stories (Sato et al.: Fig. 21 - different scenarios).

Regarding claim **9**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the video data for each playback path is stored in a different clip file (Sato et al.: col. 6, lines 60-65).

Regarding claim **16**, Sato et al. discloses a method of reproducing a data structure for managing reproduction of video data having multiple playback paths from a recording medium, the method comprising: reproducing a playlist file associated with the multiple playback paths, the playlist file from the recording medium (Figs. 18, 20-24, 30, and 31; col. 21, lines 12-19; col. 22, lines 23-33); and reproducing the clip file of the video data having multiple playback paths

from the recording medium; the video data including a plurality of data packets;

reproducing at least one clip file of the video data having multiple playback paths

from the recording medium (col. 32, line 56 - col. 33, line 16); and reproducing

management information for managing reproduction of the video data having

multiple playback paths from a management area of the recording medium, the

management information including a plurality of information files, each clip file

being associated with one of the clip information files, each clip information file

providing at least one map for the clip file, the map mapping a presentation times

stamp to a corresponding address in the associated clip file (Figs. 20-24, 49, and

50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the

addresses of the associated clips). However, Sato et al. fails to disclose that

each data packet having a packet number differentiating the data packet from the

plurality of data packets, a map identifying at least one entry point for an

associated clip file by identifying the packet number of the data packet of the at

least one entry point; and a playlist directory area storing at least one playlist file

including at least one playitem, the plurality of clip files being associated with the

playlist, the playitem identifying a same playing interval in clip file of the plurality

of clip files associated with the multiple playback paths for the playlist file, the

playitem identifying clip information files associated with the clip files of the

multiple playback paths, the playlist file storing connection information between a

previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses a method of reproducing a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP_map - entry point map); and a playlist directory storing at least one playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the clip information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at

least one entry point, and the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths for the playlist file.

Referring to the Hirayama et al. reference, Hirayama et al. discloses a method of reproducing a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet fond the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); and a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point (Figs. 8A-8C).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in order to have the multiple playback paths played back seamlessly. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths for the playlist file.

Referring to the Laurin et al. reference, Laurin et al. discloses a method having a data structure for managing reproduction of video data having multiple

playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths for the playlist file (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for each clip file in the multiple playback path being the same as disclosed by Laurin et al. in method disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **17**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 16 including that the reproducing step reproduces a group of playlist files based on the navigation information for managing the playlist files (Sato et al.: col. 32, line 56 - col. 33, line 16).

Regarding claim **18**, Sato et al. discloses a method of recording a data structure for managing reproduction of at least video data having multiple playback paths on a recording medium, the method comprising: recording a plurality of clip files of the video data having multiple paths on the recording medium, each clip file including a plurality of data packets of the video data being associated with one path of the multiple playback paths (Figs. 21, 30, and 31;

col. 6, lines 60-65; col. 33, lines 17-59); and recording management information

for managing reproduction of the video data of the recording medium, the

management information including a plurality of information files, each clip file

being associated with one of the information files, associated information file

providing at least one map identifying for the associated clip file, the map

containing presentation time stamp to a corresponding source packet address of

the associated clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines

22-56 - management tables (maps) store the addresses of the associated clips).

However, Sato et al. fails to disclose that each data packet having a packet

number differentiating the data packet from the plurality of data packets, a map

identifying at least one entry point for an associated clip file by identifying the

packet number of the data packet of the at least one entry point; and recording a

playlist file associated with the multiple playback paths, the playlist file including

at least one playitem, the plurality of clip files being associated with the playlist,

the playitem identifying a same playing interval in each clip file of the plurality of

clip files associated with the multiple playback paths for the playlist file, the

playitem identifying the information files associated with the clip files of the

multiple playback paths, the playlist file storing connection information between a

previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses a method of

recording a data structure for managing reproduction of video data having

playback paths for each title, comprising: a map including at least one entry point

for an associated clip file in the playback path (Fig. 30 - EP_map - entry point map); and recording a playlist file associated with the multiple playback paths, the playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point, and the playitem identifying a same playing interval in each

clip file of the plurality of clip files associated with the multiple playback paths for the playlist file.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet fond the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); and a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point (Figs. 8A-8C).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in order to have the multiple playback paths played back seamlessly. Furthermore, once Hirayama et al. is combined with Kato et al. then the playitem would include multiple clip files having the same playing intervals representing the multiple playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to disclose that the playitem identifying a same playing interval in each

clip file of the plurality of clip files associated with the multiple playback paths for the playlist file.

Referring to the Laurin et al. reference, Laurin et al. discloses a method having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths for the playlist file (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for each clip file in the multiple playback path being the same as disclosed by Laurin et al. in method disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **20**, Sato et al. discloses an apparatus for recording a data structure for managing reproduction of at least video data having multiple playback paths, comprising: an optical pickup (1200) configured to record data on a recording medium (Fig. 2); and a controller (200 and 1200), operably coupled to the optical pickup, configured to control the optical pickup to record a plurality of clip files of the video data having multiple the playback paths on the recording medium, each clip file including a plurality of data packets of video data

being associated with one path of the multiple playback paths (Figs. 18, 20-24, 30, and 31; col. 6, lines 60-64; col. 20, lines 22-56; col. 21, lines 12-19; col. 22, lines 23-33; col. 33, lines 17-59); the controller configured to control the optical pickup to record management information for managing reproduction of the video data having multiple playback paths on the recording medium, the video data including a plurality of data packets, the management information including a plurality of information files, each clip file being associated with one of the information files, the map mapping presentation time stamp to a corresponding address in the associated clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips; col. 22, lines 11-12). However, Sato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point; and a playlist directory area storing at least one playlist file including at least one playitem, the plurality of clip files being associated with the playlist, the playitem identifying a playing interval in the plurality of clip files associated with the multiple playback paths for the playlist file, and the playitem identifying the information files associated with the clip files of the playing interval, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses an optical computer readable medium having a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP_map - entry point map); and a playlist directory storing at least one playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an

associated clip file by identifying the packet number of the data packet of the at

least one entry point, and the playitem identifying a same playing interval in each

clip file of the plurality of clip files associated with the multiple playback paths for

the playlist file.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an

optical recording medium having a data structure for managing reproduction of

video data having multiple playback paths for each title, wherein each data

packet having a packet number differentiating the data packet fond the plurality

of data packets (Figs. 9A-9D); a playlist file that includes path number

information identifying which playback paths are associated with the playlist (Fig.

8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); and a

map identifying at least one entry point for an associated clip file by identifying

the packet number of the data packet of the at least one entry point (Figs. 8A-

8C).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have included path number information

identifying which playback paths are associated with the playlist as disclosed by

Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in

order to have the multiple playback paths played back seamlessly. Furthermore,

once Hirayama et al. is combined with Kato et al. then the playitem would include

multiple clip files having the same playing intervals representing the multiple

playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et

al. fails to disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths for the playlist file.

Referring to the Laurin et al. reference, Laurin et al. discloses a medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths for the playlist file (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for each clip file in the multiple playback path being the same as disclosed by Laurin et al. in medium disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **21**, Sato et al. discloses an apparatus for reproducing a data structure for managing reproduction of at least video data having multiple playback paths, comprising: an optical pickup (2004) configured to reproduce data recorded on a recording medium (Fig. 3); and a controller (2002), operably coupled to the optical pickup, configured to control the optical pickup to reproduce a playlist file associated with multiple playback paths in a playlist

directory area of the recording medium (Figs. 18, 20-24, and 30; col. 6, lines 60-
64; col. 20, lines 22-56; col. 21, lines 12-19; col. 22, lines 23-33), the playlist file

for identifying a portion of the video data (Figs. 18, 20-24, and 30; col. 20, lines

23-53; col. 21, lines 12-19; col. 22, lines 23-33); the controller configured to

control the optical reproducing unit to reproduce management information for

managing reproduction of the video data having multiple playback paths from the

recording medium, the video data including a plurality of data packets, the

management information including a plurality of clip information files, each clip

file being associated with one of the information files, each clip information file

providing at least one map for the associated clip file, the map mapping

presentation time stamp to a corresponding address in the associated clip file,

and the controller configured to control the optical pickup to reproduce at least

one clip file of the video data from the recording medium based on the playlist file

and the management information (Figs. 20-24, 49, and 50; col. 6, lines 60-64;

col. 20, lines 22-56 - management tables (maps) store the addresses of the

associated clips). However, Sato et al. fails to disclose that each data packet

having a packet number differentiating the data packet from the plurality of data

packets, a map identifying at least one entry point for an associated clip file by

identifying the packet number of the data packet of the at least one entry point;

and a playlist directory area storing at least one playlist file including at least one

playitem, the plurality of clip files being associated with the playlist, the playitem

identifying a playing interval in the plurality of clip files associated with the

multiple playback paths of the playlist file, the playitem identifying the information files associated with the clip files of the playing interval, the playlist file storing connection information between a previous playitem and a current playitem.

Referring to the Kato et al. reference, Kato et al. discloses an optical computer readable medium having a data structure for managing reproduction of video data having playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP_map - entry point map); and a playlist directory storing at least one playlist file including at least one playitem, the playitem identifying a playing interval of the clip file associated with the playback paths, the playitem identifying the information files associated with the clip files of the playing interval, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem (Fig. 2 - the playlist identifies the playitems and the playitems identify the clip files to be played back; Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation. However, Sato et al. in view of Kato et al. fails to disclose that each data packet having a packet number

differentiating the data packet from the plurality of data packets, the playlist file includes path number information identifying which playback paths are associated with the playlist; a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point, and the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths of the playlist file.

Referring to the Hirayama et al. reference, Hirayama et al. discloses an optical recording medium having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein each data packet having a packet number differentiating the data packet fond the plurality of data packets (Figs. 9A-9D); a playlist file that includes path number information identifying which playback paths are associated with the playlist (Fig. 8A; Fig. 9A - discloses how many stories there are; col. 9, lines 18-36); a map identifying at least one entry point for an associated clip file by identifying the packet number of the data packet of the at least one entry point (Figs. 8A-8C); and identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths (col. 8, lines 50-67 and Fig. 3B).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included path number information identifying which playback paths are associated with the playlist as disclosed by Hirayama et al. in the medium disclosed by Sato et al. in view of Kato et al. in

order to have the multiple playback paths played back seamlessly. Furthermore, once Hirayama et al. is combined with Kato et al. then the playitem would include multiple clip files having the same playing intervals representing the multiple playback paths. However, Sato et al. in view of Kato et al. in view of Hirayama et al. fails to disclose that the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths of the playlist file.

Referring to the Laurin et al. reference, Laurin et al. discloses an apparatus having a data structure for managing reproduction of video data having multiple playback paths for each title, wherein the playitem identifying a same playing interval in each clip file of the plurality of clip files associated with the multiple playback paths of the playlist file (Fig. 9; paragraph [0082] - as can be seen from Fig. 9 the different versions are the same length - while using these on a tour, people listening to different languages would start and finish at the same time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have had the playing interval for each clip file in the multiple playback path being the same as disclosed by Laurin et al. in apparatus disclosed by Sato et al. in view of Kato et al. in view of Hirayama et al. in order to easily switch between different paths without ruining the timing of all the other clip files.

Regarding claim **23**, Sato et al. in view Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 20 including that a group of playlist files is associated with each playback path (Figs. 20-24 – shows different playback paths).

Regarding claim **24**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claims 20 and 23 including that the navigation information is stored on the recording medium, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **25**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 21 including that a group of playlist files is associated with each playback path (Kato et al.: Figs. 20-24 – shows different playback paths).

Regarding claim **26**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claims 21 and 25 including that the navigation information is stored on the recording medium, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **29**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 16 including reproducing navigation information stored in a

navigation area, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **30**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 18 including that reproducing at least one playlist file reproduces a group of playlist files based on the navigation information (Sato et al.: col. 6, lines 60-67; col. 20, lines 22-56; col. 21, lines 12-15).

Regarding claim **32**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 18 recording navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **33**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 19 including that the recording the at least one playlist file records a group of playlist files based on the navigation information (Sato et al.: col. 6, lines 60-67; col. 20, lines 22-56; col. 21, lines 12-15; Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **37**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the at least one clip file is linked to more than one of the plurality of playlist files (Sato et al.: Fig. 21).

Regarding claim **44**, Sato et al. in view of Kato et al. in view of Hirayama et al. in view of Laurin et al. discloses all limitations as previously discussed with respect to claim 1 including that the clip file includes source packets, the source packets including a header and a transport packet, the transport packet including a packet identifier (PID), the source packet including a source packet number indicating the address in the clip file (Kato et al.: paragraph [0378]).

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER JONES whose telephone number is

(571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2481

HRJ
July 16, 2011
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2481